


Product specific requirements: 102. Food contact article (metal)

Version: 3.0
Last update: 08.04.2022

Material	Products	Remark
Metal	Container (non-insulated), Plate, Tray, Bowl, Flasks, Sieves	applicable also for Napkin rings Not applicable for: cookware, backing forms, insulated container, cutlery, table holloware, knives, kitchen gadgets)



No	Parameter	Method	Reference	Requirement
General requirements				
1	Workmanship	In House	-	<p>Product and its components has to meet the requirements on design and quality according to information offered by producer.</p> <p>No damages on material:</p> <ul style="list-style-type: none"> - Without scratches, dents, cracks, marred or discoloured surface - Without major defects - Without components missing, deformed or fractured - Without hardware missing - Without pits or burrs and weld smoothly filed / grounded - Without loose components or loosened fastening where rigidity is required - With proper and uniform adhesion in wooden parts - Without flash and consistent in size, color and form for plastic parts - With finished edges and seams - Even in color & clarity - Evenly aligned in seams and components
2	Design	In House	With reference to EN 12983-1	<p>The item shall be free from sharp edges, mechanical squeezing and shearing points.</p> <p>Free from burrs, splinters or sharp edge:</p> <ul style="list-style-type: none"> - Without pits or burrs and weld smoothly filed / grounded - Without scratches, dents, cracks, marred or discoloured surface - With finished edges and seams - Evenly aligned in seams and components
3	Labelling for products with food contact	In House	SR 817.023.21/ EU (EC) No. 1935/2004	<p>Products which have complied with food grade safety, but have not yet come into contact with food when sold, shall be properly labelled: A word "for foods" (for food contact), or a specific indication of their use or the "glass and fork" symbol</p> <p>Required information shall be provided. Exception: not required if the product is obviously intended for food</p> <p>Place: Directly on the product or packaging or label or on a leaflet.</p> 
4	Labelling	In House	SR 817.023.21/ 2001/95/EC	<p>The name or trade name and the address or registered office of the party that is responsible for placing the materials or articles on the market.</p> <p>Place: Directly on the product, or if technically not possible - on a label / leaflet.</p>
5	Labelling	In House	SR 817.023.21/ 2001/95/EC	<p>a) Product identification information b) General safety c) Warning and safety instructions. d) Operating or care instructions</p> <ul style="list-style-type: none"> - in a clearly visible place; - in easily readable and indelible writing; - in at least one official language (GE/IT/FR). <p>Place: Directly on the product or packaging or label or on a leaflet.</p>
6	Instruction manual	In House	SR 817.023.21	<p>Special instructions and precautions on how to use the final product if necessary. Advice on the dangers if necessary.</p> <p>clear, easy to understand and sufficient</p>
7	Claim Verification	In House	-	Must comply with all claims (including accessories, if any).
Chemical requirements				
Metals and alloys				
8	Lead/ Cadmium/ Arsen (total content)	ICP-MS	SR 817.023.21	<p>< 0,05 % Lead < 0,01% Cadmium < 0,03% Arsen;</p>
9	Lead	ICP-MS	SR 814.81	<p>Allowed alloy of brass (messing); Lead total content < 0,5%</p>
10	Tin (mandatory risk analysis)	ICP-MS	SR 817.023.21	<p>Products from Tin (min. 97 % Tin); < 0,05 % Lead < 0,01% Cadmium</p>
11	Tin as Alloy (mandatory risk analysis)	ICP-MS	SR 817.023.21	<p>Sn 99,85 % < 0,01 % Lead < 0,01% Cadmium</p>

Product specific requirements: 102. Food contact article (metal)

Version: 3.0
Last update: 08.04.2022

Material	Products	Remark
Metal	Container (non-insulated), Plate, Tray, Bowl, Flasks, Sieves	applicable also for Napkin rings Not applicable for: cookware, baking forms, insulated container, cutlery, table holloware, knives, kitchen gadgets)



No	Parameter	Method	Reference	Requirement																																																																																								
12	Specific Metall Release	EN 13130 / ICP and ICP-MS	Not regulated in CH Manor requirement to follow Resolution CM/Res (2013)9	Highly recommended to follow requirements to 21 Elements according to CM/RES (2013)9 Resolution CM/Res (2013)9 on metals and alloys used in food contact materials and articles: <table><tr><th>No</th><th>W</th><th>Element (food)</th><th>SRL (mg/kg)</th></tr><tr><td>1</td><td></td><td>Aluminium</td><td>5</td></tr><tr><td>2</td><td></td><td>Antimony</td><td>0.04</td></tr><tr><td>3</td><td></td><td>Arsenic</td><td>0.002</td></tr><tr><td>4</td><td></td><td>Barium</td><td>1.2</td></tr><tr><td>5</td><td></td><td>Beryllium</td><td>0.01</td></tr><tr><td>6</td><td></td><td>Cadmium</td><td>0.005</td></tr><tr><td>7</td><td></td><td>Chromium</td><td>0.250</td></tr><tr><td>8</td><td></td><td>Cobalt</td><td>0.02</td></tr><tr><td>9</td><td></td><td>Copper</td><td>4</td></tr><tr><td>10</td><td></td><td>Iron</td><td>40</td></tr><tr><td>11</td><td></td><td>Lead</td><td>0.010</td></tr><tr><td>12</td><td></td><td>Lithium</td><td>0.048</td></tr><tr><td>13</td><td></td><td>Manganese</td><td>1.8</td></tr><tr><td>14</td><td></td><td>Mercury</td><td>0.003</td></tr><tr><td>15</td><td></td><td>Molybdenum</td><td>0.12</td></tr><tr><td>16</td><td></td><td>Nickel</td><td>0.14</td></tr><tr><td>17</td><td></td><td>Silver</td><td>0.08</td></tr><tr><td>18</td><td></td><td>Thallium</td><td>0.0001</td></tr><tr><td>19</td><td></td><td>Tin</td><td>100</td></tr><tr><td>20</td><td></td><td>Vanadium</td><td>0.01</td></tr><tr><td>21</td><td></td><td>Zinc</td><td>5</td></tr></table>	No	W	Element (food)	SRL (mg/kg)	1		Aluminium	5	2		Antimony	0.04	3		Arsenic	0.002	4		Barium	1.2	5		Beryllium	0.01	6		Cadmium	0.005	7		Chromium	0.250	8		Cobalt	0.02	9		Copper	4	10		Iron	40	11		Lead	0.010	12		Lithium	0.048	13		Manganese	1.8	14		Mercury	0.003	15		Molybdenum	0.12	16		Nickel	0.14	17		Silver	0.08	18		Thallium	0.0001	19		Tin	100	20		Vanadium	0.01	21		Zinc	5
No	W	Element (food)	SRL (mg/kg)																																																																																									
1		Aluminium	5																																																																																									
2		Antimony	0.04																																																																																									
3		Arsenic	0.002																																																																																									
4		Barium	1.2																																																																																									
5		Beryllium	0.01																																																																																									
6		Cadmium	0.005																																																																																									
7		Chromium	0.250																																																																																									
8		Cobalt	0.02																																																																																									
9		Copper	4																																																																																									
10		Iron	40																																																																																									
11		Lead	0.010																																																																																									
12		Lithium	0.048																																																																																									
13		Manganese	1.8																																																																																									
14		Mercury	0.003																																																																																									
15		Molybdenum	0.12																																																																																									
16		Nickel	0.14																																																																																									
17		Silver	0.08																																																																																									
18		Thallium	0.0001																																																																																									
19		Tin	100																																																																																									
20		Vanadium	0.01																																																																																									
21		Zinc	5																																																																																									
13	Sensory test	DIN 10955	(EU) 1935/2004	< 3																																																																																								
Paints and varnishes (if any)																																																																																												
14	Lead (Pb), total content	DIN EN ISO 11885, ICP-OES	SR 817.023.21	n.d. in coating 100 mg/kg																																																																																								
15	Cadmium (Cd), total content	DIN EN ISO 11885, ICP-OES	SR 817.023.21	n.d. in coating 100 mg/kg																																																																																								
Product specific requirements																																																																																												
FUNCTIONAL TESTS																																																																																												
16	Hygiene	Actual Use	-	All surfaces intended to come into contact with food shall be easily cleanable under normal circumstances.																																																																																								
17	Drop Impact Test (If Applicable)	In House	-	Sample shall not produce, cracking or other abnormalities after 10 drops from a height of 80cm onto a fleece concrete floor. No functionality loss.																																																																																								
18	Stability Test (Applicable to Free-standing Items)	In House	-	The sample shall not overbalance on a 10-degree slope in all directions. Still stable, wobble a little bit.																																																																																								
19	Hinges / Locking Mechanism	In House	-	No Failure - 50 times cycling																																																																																								
PHYSICAL CHARACTERISTICS																																																																																												
20	Overall Dimensions (cm & inch) (if claimed)	Standard Measure	-	Report Actual. Shall comply with any claims (-0%, +5%).																																																																																								
21	Overall Weight (kg & lbs) (if claimed)	Standard Measure	-	Report Actual. Shall comply with any claims (-0%, +5%).																																																																																								
22	Volume or Capacity (L or lq. oz) (if claimed)	Standard Measure	-	Report Actual. Shall comply with any claims (-0%, +5%).																																																																																								
23	Handle Strength (If Applicable)	In House	-	Min. 10 lb static load (less than 1000 mL) Min. 20 lb static load (greater than 1000 mL) Or 2 heavier as claimed (if not full capacity x 1,5 times) for 10 Min																																																																																								

Product specific requirements: 102. Food contact article (metal)

Version: 3.0
Last update: 08.04.2022

Material	Products	Remark
Metal	Container (non-insulated), Plate, Tray, Bowl, Flasks, Sieves	applicable also for Napkin rings Not applicable for: cookware, baking forms, insulated container, cutlery, table holloware, knives, kitchen gadgets)



No	Parameter	Method	Reference	Requirement
PERFORMANCE TESTING				
24	Dishwashing durability (if Applicable)	EN 12875-1	-	Except silver-plated, aluminium and cast iron unless claimed to be dishwasher safe. 125 cycles – no visible change. If failure, must include warning label on package.
25	Hand Wash durability (if dishwasher is not applicable)	In House	-	Shall exhibit no exterior surface degradation after being hand washed 10 times using a national brand liquid detergent at peak of 40±5°C, followed by rinse in cold water.
26	Resistance To Corrosion (to outdoor use)	ASTM B117/ ISO 9227	-	After 24 hours in 5% salt spray (fog), there shall be no major discoloration in appearance or any major corrosion that would affect the overall product performance.
27	Resistance To Corrosion (to indoor use)	With reference to ISO 8442-2 (7.1)	-	Must fulfil the Norm ISO 8442-2 (7.1) After 6 hours by t 60 °C + 4 °C in 1% salt solution (Natriumchlorid)- no visible corrosion. There shall be no major discoloration in appearance or any major corrosion that would affect the overall product performance.
ADDITIONAL PERFORMANCE TESTING (if applicable)				
28	Effects Of Heat (if applicable; not for oven safe)	In House	-	No visual change or failure after filling up with water 1 hour at 120 °C
29	Effects of Extreme Temperature (if applicable)	In House	-	No damage after 24 hours at -18 °C and 24 hours at 80 °C
30	Handle Temperature (if applicable; not for oven safe)	In House	-	Temperature of handle should not exceed 55 °C after water of 95 °C for 5 Min is poured into the sample at room temperature.